

LEVEL TERRACE DESIGN

Job Name _____ Job Class _____

Location _____
(SWCD) (near)

By _____ Date _____

Checked by _____ Date _____

Level Terrace Design Procedures

1. Make trial terrace system layout keeping in mind terrace standard limitations.
2. Check trial layout with USLE to see that the predicted soil loss, A , is less than the allowable soil loss, T .
3. Adjust the trial layout and/or management practices as necessary.
4. Determine the runoff volume for each terrace in the system.
5. Determine the required cross sectional area for each terrace in the system.
6. Select the configuration for each terrace in the system.

Terrace System Layout



Check Trial Layout With USLE

Soil Series _____ Allowable Soil Loss - T = _____ tons/acre/year

Soil Erodibility Factor - K = _____

Cropping Sequence _____

Management Practices _____

Cropping Management Factor - C = _____

Erosion Control Practice _____

Erosion Control Practice Factor - P = _____ Rainfall Factor - R = _____

	Ter. No. _____	Ter. No. _____	Ter. No. _____	Ter. No. _____	Ter. No. _____	Ter. No. _____
Field Slope %	_____	_____	_____	_____	_____	_____
Slope Length (feet)	_____	_____	_____	_____	_____	_____
LS Factor	_____	_____	_____	_____	_____	_____
Predicted Soil Loss - A	_____	_____	_____	_____	_____	_____

Where $A = R K L S C P$

Continue if A is less than T - If not, adjust layout and/or management practices as necessary.

Determine Runoff Volume For Each Terrace

	Ter. No. _____	Ter. No. _____	Ter. No. _____	Ter. No. _____	Ter. No. _____	Ter. No. _____
Watershed Area (acres)	_____	_____	_____	_____	_____	_____
Runoff (inches)	_____	_____	_____	_____	_____	_____
Runoff Volume (cu.ft.)	_____	_____	_____	_____	_____	_____

Where Runoff Volume = $\frac{(\text{Watershed Area})(\text{Runoff})}{12}$

Determine Required Cross Sectional Area Required For Each Terrace

	Ter. No. _____	Ter. No. _____	Ter. No. _____	Ter. No. _____	Ter. No. _____	Ter. No. _____
Terrace Length (feet)	_____	_____	_____	_____	_____	_____
Required Cross Sec- tional Area (sq.ft.)	_____	_____	_____	_____	_____	_____

Where Required Cross Sectional Area = $\frac{\text{Runoff Volume}}{\text{Terrace Length}}$

Select The Terrace Configuration For Each Terrace In The System

Terrace No. _____ Terrace No. _____ Terrace No. _____ Terrace No. _____ Terrace No. _____ Terrace No. _____